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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,538	11/14/2003	Roberto Bez	2110-62-3	7956

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EXAMINER

SMITH, BRADLEY

ART UNIT	PAPER NUMBER
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2891

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/713,538

Applicant(s)

BEZ ET AL.

Examiner

Bradley K. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 1-18 and 40-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/10/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: search notes.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19-30 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim (2001/0005616). With respect to claim 19, Kim disclose a substrate having an active region, first and second insulators disposed adjacent to the active region and defining a recess over a portion of the active region and over a portion of one of the insulators, and a first conductor disposed in the recess (see figures 4C and 4D). With respect to claim 20, Kim disclose the recesses are disposed laterally with respect to the portions projecting from the substrate (figure 4D). With respect to claim 21, Kim disclose the conductive area being terminals (or contact regions). With respect to claims 22 and 23 Kim disclose the conductive regions are accommodated centrally (as opposed to in the center of) and are accommodated inside said recesses. With regards to claims 24 the examiner takes official notice that conductive regions inherently have resistivity and

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could be considered a resistor. With regards to claim 25, the examiner takes official notice that any conductive surface could be used a plate capacitor. With regards to claim 26, Kim disclose a substrate having an active region', first and second insulators disposed adjacent to the active region and defining a recess over a portion of the active region and over a portion of one of the insulators and a first conductor disposed in the recess (figures 4C and 4D). With regards to claim 27, Kim disclose the first and second insulators comprise the first and second projections. With regards to claim 28, Kim disclose first and second trenches and the insulator being in the first and second trenches. With regards to claim 29, Kim disclose wherein the insulators define a recess over the insulators (see figure 4D). With regards to claim 30, Kim discloses a third insulator (404). With respect to claim 34, Kim disclose a first insulator disposed in a substrate defining a first recess and a first conductor in the recess.

Claims 19, 21, 26-39 are rejected under 35 U.S.C. 102(a) as being anticipated by Ikeda et al.. Ikeda et al. disclose a substrate having an active region, first and second insulators disposed adjacent to the active region and defining a recess over a portion of the active region and over a portion of one of the insulators, and a first conductor disposed in the recess (see figures 12 and 22 ). With respect to claim 21, Ikeda et al. disclose memory cell on top of the active areas. With regards to claim 27, Ikeda disclose the first and second insulators comprise the first and second projections. With regards to claim 28, Ikeda disclose first and second trenches and the insulator being in the first and second trenches. With regards to claim 29, Ikeda disclose wherein the insulators define a recess over the insulators (see figures 12 and 22). With regards to

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claim 30, Ikeda disclose a third insulator ( 20a). With regards to claim 31-33, Ikeda disclose the conductive layer is a floating gate (33) with an insulator (25) on top. With regards to claim 34, Ikeda et al. disclose a first insulator disposed in a substrate defining a first recess and a first conductor in the recess. With regards to claim 35, Ikeda et al. disclose the insulator has projections that define the recess (see figures 12 and 22). With regards to claim 36, Ikeda et al. disclose a trench in the substrate and the first insulation layer is in the trench. With regards to claims 37 the examiner takes official notice that conductive regions inherently have resistivity and could be considered a resistor. With regards to claim 38, the examiner takes official notice that any conductive surface could be used a plate capacitor. With regards to claim 39 Ikeda disclose a second insulation layer over the first conductor and a second conductor over the second insulation layer.

### ***Response to Arguments***

Applicant's arguments with respect to claim 11/04/05 have been considered but are moot in view of the new ground(s) of rejection.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley K. Smith whose telephone number is 571-272-1884. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bradley K Smith  
Primary Examiner  
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